

NOTIFICATION.

No. J. 864—Legis. 16-09-37, dated Bangalore, 11th September 1911.

**Rules under the Mysore Weights and Measures Regulation,
III of 1902.**

Preamble.—In exercise of the powers conferred by Regulation III of 1902, the Government of His Highness the Maharaja of Mysore are pleased to prescribe the following rules for regulating the use of weights and measures of capacity in all parts of the State from and after the 1st day of July 1912.

Nothing in these rules is intended to have application to, or to interfere with, the use of the British or the metric system of weights and measures, or any other recognized system not based on a weight or measure called the "seer" or any sub-division or multiple thereof, as a unit.

Rule 1.—(1) The standard of weight shall be the "seer" weight, which is a mass of metal in the possession of Government equal to the weight of 24 rupees (of 180 grains Troy each) of the British Indian currency.

(2) The standard of measure of capacity shall be the "seer" measure, which is a hollow bronze cylinder in the possession of Government, capable, when filled to the brim, of holding just 108 tolas (of 180 grains Troy each) weight of distilled water at its maximum density and under the normal atmospheric pressure.

Rule 2.—(1) The standard seer weight and seer measure aforementioned shall be carefully secured in the State Huzur Treasury in the personal custody of the Officer in charge of the Treasury.

(2) A duplicate copy of the standard seer weight and a duplicate copy of the standard seer measure shall be kept in the Bangalore Central Jail in the personal custody of the Superintendent of the Jail; and the same shall be compared and, if necessary, corrected not less often than once in five years with the standards preserved in the State Huzur Treasury.

The Superintendent shall keep a register in which the fact of such comparison and correction shall be entered and certified to by him and the Officer in charge of the State Huzur Treasury.

Rule 3.—The use of the following weights and measures of capacity is hereby recognized:—

(A) Weights—

Tola (=180 grains, Troy), equal to one twenty-fourth of a seer as defined in Rule 1 (1).

Half-tola; quarter-tola; and smaller sub-divisions of a tola.

Multiples of a tola to be described as so many tolas.

Seer, equal to the standard seer weight as defined in Rule 1 (1).

Half-seer (*Achcheru*), equal to 12 tolas.

Quarter-seer (*Pavu*), equal to 6 tolas.

One-eighth seer (*Arapavu*), equal to 3 tolas.

Maund (*Mana*), equal to 40 seers.

Lower multiples of a seer, to be described as so many seers (with or without fractional parts), or as such fraction of a maund; e.g., 5 seers (*Pancheru*); 10 seers (*Dhadiah*); $\frac{1}{2}$ maund; $\frac{1}{4}$ maund, etc.

Multiples of a maund, to be described as so many maunds (with or without fractional parts); e.g., 2 maunds; $2\frac{1}{2}$ maunds, etc.

Bengal seer (*Bengal seru*), equal to 80 tolas.

Bengal maund (*Bengal mana*), equal to 40 Bengal seers of 80 tolas each.

Multiples of the Bengal seer and Bengal maund, to be described as so many Bengal seers or Bengal maunds.

Pound (*Avoirdupois*) *lb.* equal to 7,000 grains Troy [108 pounds = 175 seers as defined in Rule 1 (1)].

Half-pound; quarter-pound; and smaller sub-divisions of a pound.

Multiples of a pound to be described as so many pounds with or without fractional parts.

A *stone* equal to 14 lbs. A *quarter* equal to 28 lbs. A *cwt.* equal to 112 lbs. And a *ton* equal to 2,240 lbs. or 20 cwts.

(B) *Measures*—

Seer, equal to the standard seer measure as defined in Rule 1 (2).

Sub-division of a seer, as follows :—

Half-seer (*Achcheru*); quarter-seer (*Pavu*); one-eighth seer (*Arapavu*); one-sixteenth seer (*Chataku*).

Balla, equal to 4 seers; Kolaga equal to 8 seers.

Lower multiples of a seer, to be described as so many seers (with or without fractional parts), or such fraction of a kolaga.

Palla, equal to 100 seers.

Khandi, equal to 20 kolagas or 160 seers.

Lower multiples of a kolaga to be described as so many kolagas (with or without fractional parts), or such fraction of a palla or khandi.

Rule 4.—The Superintendent of the Bangalore Central Jail shall manufacture copies of the more commonly used weights and measures which, after being carefully verified and stamped with the stamp of verification, shall be available for sale at prices not exceeding 10 per cent over and above the cost of manufacture.

Rule 5.—Correct copies of the standards of weight and measure, and also of the more commonly used weights and measures, shall be supplied by the Superintendent of the Central Jail, Bangalore, to the offices mentioned in Section 3 of the Regulation, as well as to every Amildar's Office and Police Station. These shall be verified not less often than once in ten years by the Superintendent of the Central Jail, and shall be replaced whenever necessary.

Rule 6.—In the absence of usage or an express or implied understanding to the contrary, it will be assumed that in measuring an article by any of the recognized measures of capacity, the measure is not heaped, but either is stricken with a round stick or roller, straight and of the same diameter from end to end, or, if the article sold cannot from its size or shape be conveniently stricken, is filled in all parts as nearly to the level of the brim as the size and shape of the article will admit.

Rule 7.—Weights and measures of capacity shall be made of metal: provided that measures below a seer in capacity may be made either of metal or of wood or of bamboo.

Rule 8.—The shape of weights, except where handles or depressions for lifting occur, shall, as far as possible, be such that both the upper and under surfaces shall be flat and the horizontal sections circular or rectangular.

Measures shall be hollow cylinders, with as nearly as possible a plane base, and internal diameter equal to not less than two-fifths and not more than three-fifths of the depth.

Rule 9.—Every weight, except where the small size of the weight renders it impracticable, shall have the denomination of such weight stamped on the top or side thereof in legible figures and letters.

Every measure of capacity shall have the denomination thereof stamped on the outside of such measure in legible figures and letters.

A weight or measure not in conformity with this rule shall not be stamped with a stamp of verification under these rules.

Rule 10.—Every weight, except where the small size of the weight renders it impracticable, and every measure of capacity, manufactured in the Bangalore Central Jail or presented for verification thereat or at such other place as the Government may appoint for this purpose, shall be verified and stamped with a stamp of verification in the form given below.



Form of stamp.—The form of the stamp shall be as in the margin, the figures denoting the year of stamping.

Rule 11.—Subject to any directions that may be given by Government, a Deputy Commissioner may empower one or more officers in his district to act as Inspectors of weights and measures, whose duty will be to inspect weights and measures and weighing instruments in use. For this purpose and for the purpose of Section 153* of the Code of Criminal Procedure, they shall be deemed, in regard to the whole of the local area under their jurisdiction, to have been appointed officers in charge of a Police Station.

Rule 12.—(1) Any person having in his possession any weights and measures not manufactured by Government, may apply to the Superintendent of the Bangalore Central Jail or to such other officer as may be appointed by Government for this purpose for the verification and stamping of such weights and measures. Any weight or measure once verified may be verified again on application.

(2) Every such application shall be stamped with a Court fee of the value of one anna for each weight or measure to be dealt with.

Rule 13.—(1) The officer making the verification under the previous rule will, without any extra charge, make any slight adjustment that may be found necessary to make the weights and measures perfectly accurate.

(2) He is also empowered to deface, or render incapable of use, or refuse to verify, correct or stamp, any weight or measure brought to him for verification or correction, which appears to him unfit for verification or correction.

APPENDIX.

HINTS FOR TESTING WEIGHTS AND MEASURES.

I. Testing of weights.—

Sensibility of balance.—When weights have to be verified by standard weights and only common scales or balances are available, the first thing to be done is to try the balance as to its degree of sensibility, apart from the question of equilibrium. Suppose a maund weight of 40 seers is received for verification. Put a standard maund weight in a right-hand scale and exactly counterbalance it by weights in the left. If 40 grains weight will make a difference when placed in either scale, the balance may be considered good enough for the verification of a common maund weight of commerce. If a balance does not turn with $\frac{1}{800}$ part of the weight that may be in one scale, it cannot be used for very accurate purposes.

Verification of weights.—The maund weight received for verification should be examined thus:—

Place the standard maund weight in the right-hand scale and exactly counterbalance it; then take it out and put in its place the weight to be verified. If the beam shows an equipoise, the weight is correct. It is of no consequence whether the arms of the beam are equal or not, or in other words, whether the scales used for this test are or are not correct.

*Section 153 of the Code of Criminal Procedure.—(1) Any officer in charge of a Police Station may, without a warrant, enter any place within the limits of such station for the purpose of inspecting or searching for any weights or measures or instruments for weighing, used or kept therein, whenever he has reason to believe that there are in such place any weights, measures or instruments for weighing which are false.

(2) If he finds in such place any weights, measures or instruments for weighing which are false, he may seize the same, and shall forthwith give information of such seizure to a magistrate having jurisdiction.

Correctness of balance.—To ascertain if the balance is correct, put a standard maund weight into the right-hand scale and exactly counterbalance it with stones, sand or any other material in the left-hand scale. Then take it out and put in other weights into the right-hand scale and produce exact equipoise. It is now evident that the two weights weighed in the right-hand scale are equal to one another: remove the weight from the left-hand scale and put therein the weight taken from the right-hand scale, and if the beam shows a true equipoise, the balance is correct; if not, the beam or the scales can only be adjusted by a competent workman. This applies to all beam balances.

II. Testing of grain and liquid measures.—

Diameter of grain measures.—When a grain measure is received for being stamped, the first thing to be done is to measure the diameter carefully. If the diameter of the measure is exactly the same as that of the standard measure, the measure may be accepted for testing. If not, the measure should be rejected.

NOTE.—If a measure is not quite round, a mean between the longest and shortest diameters should be taken.

Method of test employed.—The only system of test to be employed in testing measures is that by volume of water, for the proper performance of which the officer is provided with either a specifically constructed set of standardized testing vessels or with two test glasses, a twenty-ounce glass equivalent to a quart and a five-ounce glass graduated to quarters of an ounce.

Preliminaries to testing.—The following preliminaries must be attended to before the actual process of testing can be commenced. The best drinking water available should be obtained, as it is the clearest. The measure to be tested should be well washed out, and if it is of wood or bamboo, water should be allowed to stand in it for a quarter of an hour before testing, so as to guard against absorption during the testing, whereby the result would be falsified. If the measure is found to be leaky, the leaks should be caulked on the outside only with pitch or sealing-wax.

Process of testing.—The test should then be applied in the following manner:—The rim of the measure should be moistened, as otherwise water may stand without spilling quite a sixteenth of an inch above it; and in a measure of five inches diameter this will represent 1·39 tolas of rice. The measure should then be filled with water. This is done by pouring water into it from the test glass, either the large twenty-ounce glass or the small five-ounce one, or both being used according to the size of the measure under examination. In pouring water from the test glass into the measure, care should be taken to prevent the water from overtopping the rim of the measure. The surface of the water must be exactly level with the rim. It can be easily ascertained how many ounces of water have been used to fill the measure. The quantity of water, if any, found to have been spilt should be deducted from the total quantity poured out from the test glass. If it be found impossible to staunch a leaky measure, reliable results may be obtained by catching the water which escapes by leakage, measuring it, and deducting the quantity from that poured into the measure from the test glass. The remainder represents the exact capacity of the measure in ounces of water. If this is equal to the proper capacity of the measure, calculated at 44·5 fluid ounces for the standard seer measure, the measure may be taken to be correct and stamped accordingly; otherwise it should be rejected. The "correct copies" of measures themselves should on no account be used in the application of the test, as it is almost impossible to pour out the liquid from such measures filled to the brim without spilling. If, however, special vessels of standard capacities are made with a narrow neck and broad lip for pouring, similar in shape to the gallon pot used in the Excise Department, and standardized to fluid ounces, there is no objection to such measures being used for the purpose of testing. The use of ounce glasses will then be only required in the primary test of capacity of such special measures.

By Order,

C. S. BALASUNDARAM IYER,
Officiating Secretary to Government,
General and Revenue Departments.